



210987



April 14, 1998

Yunru Yang
Roy F. Weston
Raritan Plaza III, Suite 28
101 Fieldcrest Avenue
Edison, New Jersey 08837-3622

APR 21 1998

Dear Ms. Yang:

RE: REP #2226 PCB ANALYSIS DCL Set # 97C-0423-01

1. MDL AND PQL: The majority of the samples were analyzed at and reported from various dilution analyses. On the Forms 1 of these samples, however, the MDLs and PQLs were corrected only for the moisture content of the samples but not for the dilution factors. All the reported MDLs and PQLs were based on the undiluted analysis, while the dilution factor was clearly listed in Forms 1. The undiluted analysis cannot be used to determine whether the PCBs are present or not because the chromatograms of these analyses were over the 100% plotting scale. Since these chromatograms are not acceptable, WESTON feels that reporting the MDLS/PQLs from these undiluted analyses is incorrect. All data generated under RFP #2226 were reported in the same fashion and therefore are affected.

Response: The MDL and PQL were not corrected for dilution on the Form 1 reports submitted. The correct MDL and PQL for each dilution, is the MDL and PQL reported multiplied by the dilution factor.

2. WWNS1 (97C04969) AND MS/MSD: The Form 3 indicated that both Aroclor 1016 and Aroclor 1260 are present in sample WWNS1; the Form 1, however, did not reflect the presence of the two Aroclors. Please explain. Also in Form 3, the sample concentrations of Aroclor 1260 and Aroclor 1016 could not be reproduced by using the values found in the quantitation reports. In Form 2, the surrogate recoveries were not reported for WWNS1.

Response: Aroclor 1016 and Aroclor 1260 are not present in sample WWNS1, however, a large amount of Aroclor 1254 is present in the sample that causes interferences in the retention time windows for 1016 and 1260. The interferences found in the retention time windows were subtracted from the spike samples to better approximate the actual recovery.

How do you know how much to be subtracted?

It is also acknowledged that the Form 2 did not include the surrogate recovery for WWNS1. The reason for the missing data is not known, however, DCL will reprocess the surrogate recovery result and provide a corrected Form 2.

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3. VVVSED(S) (97C0491): This sample was first analyzed without dilution on 11/21/97 with unacceptable chromatogram (pp.560-561). It was then analyzed at 1:2 dilution on 11/24/97 and the chromatogram showed poor peak separation (pp. 658-659). The 1:2 dilution was again analyzed on 11/27/97 with unacceptable chromatogram (p. 751). The Form I indicated that this sample was analyzed at 11/27/97 but the result of Aroclor 1254 could not be reproduced by using the information provided in the associated quantitation report. It is not clear which analysis was used to report the Aroclor 1254 result. Since the chromatograms from 11/21/97 and 11/27/97 analyses are not acceptable, the analyst manually integrated Aroclor 1254 peaks from the 11/24/97 analysis. However, WESTON still could not reproduce the result on the chromatogram (p 658) and the Form 1 (p17).

Response: According to the analyst notebook, the third run (dated 11/27/98) was reported. On page 750 the amount representing the sum for all Aroclor 1254 peaks (group 2) is 114.3 which has a dilution factor of 2. The calculation is $114.3 \text{ (times DF 2) divided by moisture correction } 0.653$ which equals 350 which was reported on Form 1. The manual integration on page 658 was not reported by the analyst.

The 11/27/97 analysis is not acceptable due to the off-scaled chromatograms. The value reported on p. 750 was not the sum for all the Aroclor 1254 peaks; it was only the concentration of one peak. Weston feels that it is not correct to report the Aroclor 1254 result from the 11/27/97 analysis. Based on all available information, the injection from 11/24/97 analysis must be used.



May 11, 1998

Yunru Yang
Roy F. Weston
Raritan Plaza III, Suite 28
101 Fieldcrest Avenue
Edison, New Jersey 08837-3622

Dear Ms. Yang:

RE: RFP #2226 PCB ANALYSIS

DCL SET #97C-0423-01

1. The surrogate recoveries for sample WWWNS1 was not reported on form 2.

Response: Form 2 has been corrected and a copy of the corrected Form 2 is provided with this letter.

Richard W. Wade

MAY 14 1998



Roy F. Weston, Inc.
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908-417-5800 • Fax 908-417-5801



Mr. Richard Wade
Datachem Laboratories
960 West LeVoy Drive
Salt Lake City, Utah 84123

12 February 1998

RE: RFP #2226 PCB ANALYSIS
DCL SET #97C-0423-01 (SDG #VVVND1)

Dear Mr. Wade:

This letter is to request clarification on issues related to the above-referenced project.

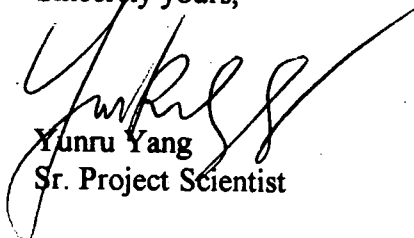
1. MDL AND PQL: The majority of the samples were analyzed at and reported from various dilution analyses. On the Forms 1 of these samples, however, the MDLs and PQLs were corrected only for the moisture content of the samples but not for the dilution factors. All the reported MDLs and PQLs were based on the undiluted analysis, while the dilution factor was clearly listed in Forms 1. The undiluted analysis can not be used to determine whether the PCBs are present or not because the chromatograms of these analyses were over the 100% plotting scale. Since these chromatograms are not acceptable, WESTON feels that reporting the MDLs/PQLs from these undiluted analyses is incorrect. All data generated under RFP #2226 were reported in the same fashion and therefore are affected.
2. WWWNS1 (97C04969) AND MS/MSD: The Form 3 indicated that both Aroclor 1016 and Aroclor 1260 are present in sample WWWNS1; the Form 1, however, did not reflect the presence of the two Aroclors. Please explain. Also in Form 3, the sample concentrations of Aroclor 1260 and Aroclor 1016 could not be reproduced by using the values found in the quantitation reports. In Form 2, the surrogate recoveries were not reported for WWWNS1.
3. VVVSED(S) (97C04971): This sample was first analyzed without dilution on 11/21/97 with unacceptable chromatogram (pp.560-561). It was then analyzed at 1:2 dilution on 11/24/97 and the chromatogram showed poor peak separation (pp. 658-659). The 1:2 dilution was again analyzed on 11/27/97 with unacceptable chromatogram (p. 751). The Form 1 indicated that this sample was analyzed at 11/27/97 but the result of Aroclor 1254 could not be reproduced by using the information provided in the associated quantitation report. It is not clear which analysis was used to report the Aroclor 1254 result. Since the chromatograms from 11/21/97 and 11/27/97 analyses are not acceptable, the analyst manually integrated



Acoclor 1254 peaks from the 11/24/97 analysis. However, WESTON still could not reproduce the result appeared on the chromatogram (p. 658) and the Form 1 (p. 17).

Please forward all explanations and resubmittals (if necessary) to my attention by 27 February 1998. Should you have any questions, please feel free to contact me at (732)417-5822.

Sincerely yours,



Yunru Yang
Sr. Project Scientist